



## General

### Guideline Title

Guidelines of care for the management of acne vulgaris.

### Bibliographic Source(s)

Zaenglein AL, Pathy AL, Schlosser BJ, Alikhan A, Baldwin HE, Berson DS, Bowe WP, Graber EM, Harper JC, Kang S, Keri JE, Leyden JJ, Reynolds RV, Silverberg NB, Stein Gold LF, Tollefson MM, Weiss JS, Dolan NC, Sagan AA, Stern M, Boyer KM, Bhushan R. Guidelines of care for the management of acne vulgaris. J Am Acad Dermatol. 2016 May;74(5):945-73.e33. [315 references] [PubMed](#)

### Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Strauss JS, Krowchuk DP, Leyden JJ, Lucky AW, Shalita AR, Siegfried EC, Thiboutot DM, Van Voorhees AS, Beutner KA, Sieck CK, Bhushan R, American Academy of Dermatology/American Academy of Dermatology. Guidelines of care for acne vulgaris management. J Am Acad Dermatol. 2007 Apr;56(4):651-63. [180 references]

This guideline meets NGC's 2013 (revised) inclusion criteria.

## Recommendations

### Major Recommendations

Level of evidence grades (I-III) and strength of recommendations (A-C) are defined at the end of the "Major Recommendations" field.

#### Strength of Recommendations for the Management and Treatment of Acne Vulgaris

Recommendation	Strength of Recommendation	Level of Evidence	References
Grading/classification system	B	II, III	Tan et al., 2007; Mallon et al., 1999; Gupta, Johnson, & Gupta, 1998; Lasék & Chren, 1998; Martin et al., 2001; Rapp et al., 2006; Dréno et al., 2007; Pochet et al., 1991; Doshi, Zaheer, & Stiller, 1997; Lucky et al., 1996; Cook, Centner, & Michaels, 1979; Burke & Cunliffe, 1984; Allen & Smith, 1982; Dréno et al., 2011; Hayashi, Akamatsu, & Kawashima, 2008; Hayashi et al., 2008; Tan et al., 2012; Tan et al., 2013; Beylot et al., 2010; Tan, Fung, & Bulger, 2006; Bergman et al., 2009; Min et al., 2013; Qureshi et al., 2006; Choi et al., 2012; Choi et al., 2011; Dobrev, 2010; Choi, Choi, & Youn, 2013; Kim et al., 2006; Xhauflaire-Uhoda & Piérard, 2007; Youn et al., 2013; Youn et al., 2009; Zane et al., 2008

<b>Microbiologic testing</b> <b>Recommendation</b>	<b>Strength of Recommendation</b>	<b>Level of Evidence</b>	<b>References</b>
			Cove, Cunliffe, & Holland, 1980; Mourelatos et al., 2007; Shaheen & Gonzalez, 2011; Fitz-Gibbon et al., 2013; Holland et al., 2010; Lomholt & Kilian, 2010; Miura et al., 2010; Tochio et al., 2009; Tomida et al., 2013
Endocrinologic testing	B	I, II	Lucky et al., 1997; Bunker et al., 1989; Lawrence et al., 1981; Timpatanapong & Rojanasakul, 1997; Lucky, 1983; Lucky et al., 1983; Abuhnaja, 2009; Arora, Seth, & Dayal, 2010
<b>Topical Therapies</b>			
Benzoyl peroxide	A	I, II	Fyrand & Jakobsen, 1986; Mills et al., 1986; Schutte, Cunliffe, & Forster, 1982
Topical antibiotics (e.g., clindamycin and erythromycin)	A	I, II	Mills et al., 2002; Bernstein & Shalita, 1980; Jones & Crumley, 1981; Shalita, Smith, & Bauer, 1984; Leyden et al., 1987; Kuhlman & Callen, 1986; Becker et al., 1981
Combination of topical antibiotics and benzoyl peroxide	A	I	Leyden et al., 2001; Lookingbill et al., 1997; Tschen et al., 2001
Topical retinoids (e.g., tretinoin, adapalene, and tazarotene)	A	I, II	Krishnan, 1976; Bradford & Montes, 1974; Shalita et al., 1999; Shalita et al., 1996; Cunliffe et al., 1997; Richter et al., 1998; Zouboulis et al., 2000; Christiansen et al., 1974; Dunlap et al., 1998; Kakita, 2000; Webster et al., 2001; Galvin et al., 1998
Combination of topical retinoids and benzoyl peroxide/topical antibiotic	A	I, II	Richter et al., 1998; Zouboulis et al., 2000
Azelaic acid	A	I	Cunliffe & Holland, 1989; Katsambas, Graupe, & Stratigos, 1989
Dapsone	A	I, II	Draelos et al., 2007; Lucky et al., 2007; Tanghetti, Harper, & Oefelein, 2012
Salicylic acid	B	II	Shalita, 1981
<b>Systemic Antibiotics</b>			
Tetracyclines (e.g., tetracycline, doxycycline, and minocycline)	A	I, II	Garner et al., 2012; Leyden et al., 2013; Lebrun-Vignes et al., 2012; Kermani et al., 2012
Macrolides (e.g., azithromycin and erythromycin)	A	I	Rafiei & Yaghoobi, 2006
Trimethoprim (with or without sulfamethoxazole)	B	II	Jen, 1980; Fenner, Wiss & Levin, 2008
Limiting treatment duration and concomitant/maintenance topical therapy	A	I, II	Gold et al., 2010; Leyden et al., 2006; Margolis et al., 2010
<b>Hormonal Agents</b>			
Combined oral contraceptives	A	I	Lucky et al., 2008; Maloney et al., 2008; Maloney et al., 2009; Plewig et al., 2009
Spirostanolactone	B	II, III	Shaw, 2000; Sato et al., 2006
Flutamide	C	III	Wang, Wang, & Soong, 1999; Castelo-Branco et al., 2009
Oral corticosteroids	B	II	Nader et al., 1984
<b>Isotretinoin</b>			
Conventional dosing	A	I, II	Amichai, Shemer, & Grunwald, 2006; Goldstein et al., 1982; Jones et al., 1983; Layton et al., 1993; Lehucher-Ceyrac & Weber-Buisset, 1993; Peck et al., 1982; Rubinow et al., 1987; Stainforth et al., 1993; Strauss et al., "A randomized trial," 2001; Strauss et al., 1984; Strauss & Stranieri, 1982; Goldsmith et al., 2004; Lehucher-Ceyrac et al., 1999; Strauss et al., "Safety,"

<b>Recommendation</b>	<b>Strength of Recommendation</b>	<b>Level of Evidence</b>	<b>References</b>
			2001; Webster, Leyden, & Gross, 2013; Alhusayen et al., 2013; Crockett et al., 2009; Crockett et al., 2010; Etminan et al., 2013; Reddy et al., 2006; Sundstrom et al., 2010; Bozdag et al., 2009; Chia et al., 2005; Cohen, Adams, & Patten, 2007; Jick, Kremers, & Vasilakis-Scaramozza, 2000; Nevoralová & Dvoráková, 2013; Rehn et al., 2009
Low-dose treatment for moderate acne	A	I, II	Agarwal, Besarwal, & Bhola, 2011; Akman et al., 2007; Borghi et al., 2011; Kaymak & Ilter, 2006; Lee et al., 2011
Monitoring	B	II	Leachman et al., 1999; Bershad et al., 1985; De Marchi et al., 2006; Zech et al., 1983
iPLEDGE and contraception	A	II	Shin et al., 2011; Collins et al., 2014
<b>Miscellaneous Therapies and Physical Modalities</b>			
Chemical peels	B	II, III	Grover & Reddu, 2003; Dréno et al., 2011; Ilknur et al., 2010
Intralesional steroids	C	III	Levine & Rasmussen, 1983; Potter, 1971
Complementary and alternative therapies (e.g., tea tree oil, herbal, and biofeedback)	B	II	Bassett, Pannowitz, & Barnetson, 1990; Enshaieh et al., 2007; Fouladi, 2012; Hunt & Barnetson, 1992; Lalla et al., 2001; Paranjpe & Kulkarni, 1995; Hughes et al., 1983
<b>Role of Diet in Acne</b>			
Effect of glycemic index	B	II	Smith et al., 2007; Kwon et al., 2012; Smith et al., 2008; Preneau et al., 2013; Ismail, Manaf, & Azizan, 2012
Dairy consumption	B	II	Adebamowo et al., 2006; Adebamowo et al., 2008; Di Landro et al., 2012

#### Recommendations for Grading and Classification of Acne

- Clinicians may find it helpful to use a consistent classification/grading scale (encompassing the numbers and types of acne lesions as well as disease severity, anatomic sites, and scarring) to facilitate therapeutic decisions and assess response to treatment.
- Currently, no universal acne grading/classifying system can be recommended.

#### Recommendations for Microbiologic and Endocrinologic Testing

- Routine microbiologic testing is unnecessary in the evaluation and management of patients with acne. Those who exhibit acne-like lesions suggestive of gram-negative folliculitis may benefit from microbiologic testing.
- Routine endocrinologic evaluation (e.g., for androgen excess) is not indicated for the majority of patients with acne. Laboratory evaluation is recommended for patients who have acne and additional signs of androgen excess.

#### Recommendations for Topical Therapies

- Benzoyl peroxide or combinations with erythromycin or clindamycin are effective acne treatments and are recommended as monotherapy for mild acne, or in conjunction with a topical retinoid, or systemic antibiotic therapy for moderate to severe acne.
- Benzoyl peroxide is effective in the prevention of bacterial resistance and is recommended for patients on topical or systemic antibiotic therapy.
- Topical antibiotics (e.g., erythromycin and clindamycin) are effective acne treatments, but are not recommended as monotherapy because of the risk of bacterial resistance.
- Topical retinoids are important in addressing the development and maintenance of acne and are recommended as monotherapy in primarily comedonal acne, or in combination with topical or oral antimicrobials in patients with mixed or primarily inflammatory acne lesions.
- Using multiple topical agents that affect different aspects of acne pathogenesis can be useful. Combination therapy should be used in the majority of patients with acne.
- Topical adapalene, tretinoin, and benzoyl peroxide can be safely used in the management of preadolescent acne in children.
- Azelaic acid is a useful adjunctive acne treatment and is recommended in the treatment of postinflammatory dyspigmentation.
- Topical dapsone 5% gel is recommended for inflammatory acne, particularly in adult females with acne.
- There is limited evidence to support recommendations for sulfur, nicotinamide, resorcinol, sodium sulfacetamide, aluminum chloride, and zinc in the treatment of acne.

#### Recommendations for Systemic Antibiotics

- Systemic antibiotics are recommended in the management of moderate and severe acne and forms of inflammatory acne that are resistant to topical treatments.
- Doxycycline and minocycline are more effective than tetracycline, but neither is superior to each other.
- Although erythromycin and azithromycin can be effective in treating acne, its use should be limited to those who cannot use the tetracyclines (i.e., pregnant women or children <8 years of age). Erythromycin use should be restricted because of its increased risk of bacterial resistance.
- Use of systemic antibiotics, other than the tetracyclines and macrolides, is discouraged because there are limited data for their use in acne. Trimethoprim-sulfamethoxazole and trimethoprim use should be restricted to patients who are unable to tolerate tetracyclines or in treatment-resistant patients.
- Systemic antibiotic use should be limited to the shortest possible duration. Re-evaluate at 3 to 4 months to minimize the development of bacterial resistance. Monotherapy with systemic antibiotics is not recommended.
- Concomitant topical therapy with benzoyl peroxide or a retinoid should be used with systemic antibiotics and for maintenance after completion of systemic antibiotic therapy.

#### Recommendations for Hormonal Agents

- Estrogen-containing combined oral contraceptives are effective and recommended in the treatment of acne in females.
- Spironolactone is useful in the treatment of acne in select females.
- Oral corticosteroid therapy can be of temporary benefit in patients who have severe inflammatory acne while starting standard acne treatment.
- In patients who have well-documented adrenal hyperandrogenism, low-dose oral corticosteroids are recommended in treatment of acne.

See Table VIII in the original guideline document for the World Health Organization recommendations for combined oral contraceptive usage eligibility.

#### Recommendations for Isotretinoin

- Oral isotretinoin is recommended for the treatment of severe nodular acne.
- Oral isotretinoin is appropriate for the treatment of moderate acne that is treatment-resistant or for the management of acne that is producing physical scarring or psychosocial distress.
- Low-dose isotretinoin can be used to effectively treat acne and reduce the frequency and severity of medication-related side effects. Intermittent dosing of isotretinoin is not recommended.
- Routine monitoring of liver function tests, serum cholesterol, and triglycerides at baseline and again until response to treatment is established is recommended. Routine monitoring of complete blood count is not recommended.
- All patients treated with isotretinoin must adhere to the iPLEDGE risk management program.
- Females of child-bearing potential taking isotretinoin should be counseled regarding various contraceptive methods including user-independent forms.
- Prescribing physicians also should monitor their patients for any indication of inflammatory bowel disease and depressive symptoms and educate their patients about the potential risks with isotretinoin.

#### Recommendations for Miscellaneous Therapies and Physical Modalities

- There is limited evidence to recommend the use and benefit of physical modalities for the routine treatment of acne, including pulsed dye laser, glycolic acid peels, and salicylic acid peels.
- Intralesional corticosteroid injections are effective in the treatment of individual acne nodules.

#### Recommendation for Complementary/Alternative Therapies

Herbal and alternative therapies have been used to treat acne. Although most of these products appear to be well tolerated, limited data exist regarding the safety and efficacy of these agents to recommend their use in acne.

#### Recommendations for the Role of Diet in Acne

- Given the current data, no specific dietary changes are recommended in the management of acne.
- Emerging data suggest that high glycemic index diets may be associated with acne.
- Limited evidence suggests that some dairy, particularly skim milk, may influence acne.

#### Definitions

## Levels of Evidence

- I. Good-quality patient-oriented evidence (i.e., evidence measuring outcomes that matter to patients: morbidity, mortality, symptom improvement, cost reduction, and quality of life)
- II. Limited-quality patient-oriented evidence
- III. Other evidence, including consensus guidelines, opinion, case studies, or disease-oriented evidence (i.e., evidence measuring intermediate, physiologic, or surrogate end points that may or may not reflect improvements in patient outcomes)

## Strength of Recommendations

- A. Recommendation based on consistent and good quality patient-oriented evidence
- B. Recommendation based on inconsistent or limited quality patient-oriented evidence
- C. Recommendation based on consensus, opinion, case studies, or disease-oriented evidence

## Clinical Algorithm(s)

None provided

## Scope

## Disease/Condition(s)

Acne vulgaris

Note: This guideline does not examine the treatment of acne sequelae (e.g., scarring or postinflammatory dyschromia).

## Guideline Category

Evaluation

Management

Treatment

## Clinical Specialty

Dermatology

Family Practice

Pediatrics

## Intended Users

Physicians

## Guideline Objective(s)

- To address the management of adolescent and adult patients who present with acne vulgaris (AV)
- To discuss various acne treatments, including topical therapies, systemic agents, physical modalities, including lasers and photodynamic therapy
- To review grading and classification systems for AV, microbiology and endocrinology testing, complementary/alternative therapies, and the role of diet

Note: This guideline does not examine the treatment of acne sequelae (e.g., scarring or postinflammatory dyschromia).

## Target Population

Adolescents and adults who present with acne vulgaris

## Interventions and Practices Considered

### Classification/Evaluation

1. Use of consistent classification/grading scale
2. Microbiologic testing
3. Endocrinologic testing

### Management/Treatment

1. Topical therapy
  - Benzoyl peroxide
  - Topical antibiotics (erythromycin and clindamycin)
  - Topical retinoids (tretinoin, adapalene, tazarotene)
  - Azelaic acid
  - Dapsone
  - Salicylic acid
  - Combination topical agents
2. Systemic antibiotics
  - Tetracyclines (tetracycline, minocycline, doxycycline)
  - Macrolide antibiotics (azithromycin, erythromycin)
  - Trimethoprim (with or without sulfamethoxazole)
3. Hormonal agents
  - Combined oral contraceptives
  - Spironolactone
  - Flutamide
  - Oral corticosteroids
4. Isotretinoin
5. Miscellaneous therapy
  - Chemical peels
  - Intralesional steroids
6. Complementary/alternative therapy
  - Tea tree oil
  - Herbal agents
  - Biofeedback
7. Dietary restrictions (not recommended)

## Major Outcomes Considered

- Accuracy, reliability, and sensitivity of acne grading and classification systems
- Usefulness of endocrinologic and microbiologic testing
- Number of lesions
- Severity of lesions
- Sebum levels
- Recurrence rate
- Quality of life
- Psychological and emotional improvement
- Adverse effects of treatment

# Methodology

## Methods Used to Collect/Select the Evidence

Hand-searches of Published Literature (Primary Sources)

Hand-searches of Published Literature (Secondary Sources)

Searches of Electronic Databases

## Description of Methods Used to Collect/Select the Evidence

An evidence-based model was used and evidence was obtained using a systematic search of PubMed and the Cochrane Library database from May 2006 through September 2014 for clinical questions addressed in the previous version of this guideline published in 2007, and 1964 to 2014 for all newly identified clinical questions. Searches were prospectively limited to publications in the English language. Medical Subject Headings (MeSH) terms and strings used in various combinations in the literature search included: acne or acne vulgaris combined with treatment, therapy, prevention, prophylaxis, grading, classification, scoring, microbiology, endocrinology, hormone, topical, retinoid, benzoyl peroxide (BP), antibiotic, doxycycline, minocycline, tetracycline, macrolide, erythromycin, azithromycin, trimethoprim (with or without sulfamethoxazole), oral contraceptives, antiandrogen, corticosteroid, isotretinoin, peel, complementary, alternative, herbal, diet, glycemic index, milk, antioxidants, probiotics, and fish oil. Additional studies were identified by hand-searching bibliographies of publications, including reviews and meta-analyses.

### Inclusion Criteria

- Type of study:
  - Control of exposure: interventional, observational
  - Timing: prospective, retrospective
  - Design: evidence-based clinical guidelines, systematic reviews and meta-analyses, randomized controlled trials, non-randomized clinical trials, cross-sectional studies and cohort studies, case control studies, case reports
- Outcomes:
  - Preference for outcomes that matter to patients and help them live longer or better lives (reduced mortality, symptom improvement, improved quality of life, increased safety, etc.)
  - Depending on the clinical question, disease-oriented evidence outcomes were also considered (measurement of intermediate, physiologic, or surrogate end points that may or may not reflect improvements in patient outcomes (e.g., blood loss, chemistry, anesthetic plasma levels, physiologic function, etc.).
- Language: Studies only in English
- Publication: Full-text available

### Exclusion Criteria

- Type of study: animal studies, in-vitro research, letters
- Outcomes: No patient-oriented outcomes measured
- Language: Non-English studies
- Publication: Only abstract or no abstract

## Number of Source Documents

A total of 1145 abstracts were initially assessed for possible inclusion; 242 were retained for final review based on relevancy and the highest level of available evidence for the outlined clinical questions. (See the "Description of Methods to Formulate the Recommendation" field for the list of clinical questions.)

## Methods Used to Assess the Quality and Strength of the Evidence

Weighting According to a Rating Scheme (Scheme Given)

## Rating Scheme for the Strength of the Evidence

Evidence was graded using a three-point scale based on the quality of methodology and the overall focus of the study as follows:

- I. Good-quality patient-oriented evidence (i.e., evidence measuring outcomes that matter to patients: morbidity, mortality, symptom improvement, cost reduction, and quality of life)
- II. Limited-quality patient-oriented evidence
- III. Other evidence, including consensus guidelines, opinion, case studies, or disease-oriented evidence (i.e., evidence measuring intermediate, physiologic, or surrogate end points that may or may not reflect improvements in patient outcomes)

## Methods Used to Analyze the Evidence

Review of Published Meta-Analyses

Systematic Review with Evidence Tables

## Description of the Methods Used to Analyze the Evidence

Evidence tables were generated for the identified studies and used by the work group in developing recommendations. In addition, the evidence tables generated for the Academy's previous acne guideline were also used by the work group. The Academy's previous published guidelines on acne were also evaluated, as were other current published guidelines on acne. Relevant references published after September 2014 are provided solely as supplemental supporting text information for recommendations as derived from the systematic search, and to address comments received during the guideline review and approval process.

The available evidence was evaluated using a unified system called the Strength of Recommendation Taxonomy (SORT) developed by editors of the United States (U.S.) family medicine and primary care journals (i.e., *American Family Physician*, *Family Medicine*, *Journal of Family Practice*, and *BMJ USA*).

Evidence was graded using a 3-point scale based on the quality of methodology (e.g., randomized control trial, case control, prospective/retrospective cohort, case series, etc) and the overall focus of the study (i.e., diagnosis, treatment/prevention/screening, or prognosis) (see the "Rating Scheme for the Strength of the Evidence" field).

## Methods Used to Formulate the Recommendations

Expert Consensus

## Description of Methods Used to Formulate the Recommendations

A work group of 17 recognized acne experts, 1 general practitioner, 1 pediatrician, and 1 patient was convened to determine the scope of the guideline and identify clinical questions in the diagnosis and management of acne vulgaris.

Clinical questions used to structure the evidence review:

- What systems are most commonly used for the grading and classification of adult acne and acne vulgaris in adolescents (11-21 years of age) to adults?
- What is the role of microbiologic and endocrine testing in evaluating patients with adult acne and acne vulgaris in adolescents to adults?
- What is the effectiveness and what are the potential side effects of topical agents in the treatment of adult acne and acne vulgaris in adolescents to adults?
- What is the effectiveness and what are the potential side effects of systemic antibacterial agents in the treatment of adult acne and acne vulgaris in adolescents to adults?
- What is the effectiveness and what are the potential side effects of hormonal agents in the treatment of adult acne and acne vulgaris in adolescents to adults?
- What is the effectiveness and what are the potential side effects of isotretinoin in the treatment of adult acne and acne vulgaris in adolescents to adults?

- What is the effectiveness and what are the potential side effects of physical modalities for the treatment of acne vulgaris in adolescents to adults?
- What is the effectiveness and what are the potential side effects of complementary/alternative therapies in the treatment of adult acne and acne vulgaris in adolescents to adults?
- What is the role of diet in adult acne in adolescents to adults?

See Table 1 in the original guideline document for further details on clinical questions.

Clinical recommendations were developed on the best available evidence tabled in the guideline. In those situations where documented evidence-based data were not available or were showing inconsistent or limited conclusions, expert opinion and medical consensus was used to generate clinical recommendations.

## Rating Scheme for the Strength of the Recommendations

### Strength of the Recommendations

- A. Recommendation based on consistent and good-quality patient-oriented evidence
- B. Recommendation based on inconsistent or limited-quality patient-oriented evidence
- C. Recommendation based on consensus, opinion, case studies, or disease-oriented evidence

## Cost Analysis

A formal cost analysis was not performed and published cost analyses were not reviewed.

## Method of Guideline Validation

Internal Peer Review

## Description of Method of Guideline Validation

These guidelines have been developed in accordance with the American Academy of Dermatology (AAD)/American Academy of Dermatology Association "Administrative Regulations for Evidence-Based Clinical Practice Guidelines" (version approved August 2012), which include the opportunity for review and comment by the entire AAD membership and final review and approval by the AAD Board of Directors.

## Evidence Supporting the Recommendations

### References Supporting the Recommendations

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## Type of Evidence Supporting the Recommendations

The type of supporting evidence is identified and graded for each recommendation (see the "Major Recommendations" field).

## Benefits/Harms of Implementing the Guideline Recommendations

### Potential Benefits

Appropriate use of medications and other therapy to treat acne vulgaris

### Potential Harms

Side effects of medication

See also the original guideline document for a thorough discussion of the side effects of each medication. See the prescribing information tables (I-XXXIII) in the original guideline document for a quick overview on adverse effects, toxicities, and drug interactions.

## Contraindications

### Contraindications

- In general, the use of combination oral contraceptive pills (COCs) for acne should be avoided within 2 years of first starting menses or in patients who are <14 years of age unless it is clinically warranted.
- The tetracycline class of antibiotics should be considered first-line therapy in moderate to severe acne, except when contraindicated because of other circumstances (i.e., pregnancy, ≤8 years of age, or allergy).

See the prescribing information tables (I-XXXIII) in the original guideline document for specific contraindications for recommended treatments.

## Qualifying Statements

### Qualifying Statements

Adherence to these guidelines will not ensure successful treatment in every situation. Furthermore, these guidelines should not be interpreted as setting a standard of care, or be deemed inclusive of all proper methods of care, nor exclusive of other methods of care reasonably directed to obtaining the same results. The ultimate judgment regarding the propriety of any specific therapy or technique must be made by the physician and the patient in light of all the circumstances presented by the individual patient, and the known variability and biologic behavior of the disease. This guideline reflects the best available data at the time the guideline was prepared. The results of future studies may require revisions to the recommendations in this guideline to reflect new data.

## Implementation of the Guideline

### Description of Implementation Strategy

An implementation strategy was not provided.

### Implementation Tools

For information about availability, see the *Availability of Companion Documents* and *Patient Resources* fields below.

## Institute of Medicine (IOM) National Healthcare Quality Report Categories

### IOM Care Need

Getting Better

Living with Illness

### IOM Domain

Effectiveness

## Identifying Information and Availability

### Bibliographic Source(s)

Zaenglein AL, Pathy AL, Schlosser BJ, Alikhan A, Baldwin HE, Berson DS, Bowe WP, Graber EM, Harper JC, Kang S, Keri JE, Leyden JJ, Reynolds RV, Silverberg NB, Stein Gold LF, Tollefson MM, Weiss JS, Dolan NC, Sagan AA, Stern M, Boyer KM, Bhushan R. Guidelines of care for the management of acne vulgaris. *J Am Acad Dermatol*. 2016 May;74(5):945-73.e33. [315 references] [PubMed](#)

### Adaptation

Not applicable: The guideline was not adapted from another source.

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### Guideline Developer(s)

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### Guideline Committee

Management of Acne Vulgaris Work Group

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Work group members completed a disclosure of interests, which was periodically updated and reviewed throughout guideline development. If a potential conflict was noted, the work group member recused him or herself from discussion and drafting of recommendations pertinent to the topic area of the disclosed interest.

See the original guideline document for the list of authors' conflict of interest disclosure.

## Guideline Status

This is the current release of the guideline.

This guideline updates a previous version: Strauss JS, Krowchuk DP, Leyden JJ, Lucky AW, Shalita AR, Siegfried EC, Thiboutot DM, Van Voorhees AS, Beutner KA, Sieck CK, Bhushan R, American Academy of Dermatology/American Academy of Dermatology. Guidelines of care for acne vulgaris management. *J Am Acad Dermatol.* 2007 Apr;56(4):651-63. [180 references]

This guideline meets NGC's 2013 (revised) inclusion criteria.

## Guideline Availability

Available from [Journal of the American Academy of Dermatology Web site](#).

## Availability of Companion Documents

The following is available:

- American Academy of Dermatology (AAD) guideline development process. Schaumburg (IL): American Academy of Dermatology (AAD). Available from the [American Academy of Dermatology \(AAD\) Web site](#).

## Patient Resources

A variety of resources about acne are available from the [American Academy of Dermatology \(AAD\) Web site](#) [REDACTED].

Please note: This patient information is intended to provide health professionals with information to share with their patients to help them better understand their health and their diagnosed disorders. By providing access to this patient information, it is not the intention of NGC to provide specific medical advice for particular patients. Rather we urge patients and their representatives to review this material and then to consult with a licensed health professional for evaluation of treatment options suitable for them as well as for diagnosis and answers to their personal medical questions. This patient information has been derived and prepared from a guideline for health care professionals included on NGC by the authors or publishers of that original guideline. The patient information is not reviewed by NGC to establish whether or not it accurately reflects the original guideline's content.

## NGC Status

This NGC summary was completed by ECRI Institute on July 25, 2007. The information was verified by the guideline developer on August 2, 2007. This summary was updated by ECRI Institute on November 11, 2016. The updated information was verified by the guideline developer on December 13, 2016.

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